

**REMARKS/ARGUMENTS**

Receipt of the office action mailed September 28, 2001 is duly acknowledged. Claims 79-82 have been amended. Claims 83-92 have been added.

Claims 79-92 are pending.

Applicant has amended the specification to contain a specific reference to the prior application. Figure 1 has been designated as "Prior Art" as suggested by the examiner.

The title of the invention has been amended. The new title is believed to be descriptive and clearly indicative of the invention to which the claims are directed.

Claim 82 has been amended to depend from claim 81.

Claims 79-82 stand rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative under 35 U.S.C. 103(a) as obvious over Roh. Reconsideration and withdrawal of this rejection is respectfully requested.

The Office Action asserts that "Roh teaches, with reference to Figure 3, a capacitor comprising: a first electrode 16 and a second electrode 18; a dielectric 17 provided between the electrodes." The Office Action further asserts that "[w]ith regard to claims 80 and 81, Roh teaches that the first electrode is formed of platinum (col. 5, lines 3-4). With regard to claim 82, Roh teaches that the platinum electrode 16 is the lower electrode (as seen in figure 3)."

The Office Action also asserts that the additional limitations of claim 79, particularly that the electrode is formed by a CVD process, annealed with UV light and annealed in an oxygen atmosphere at low temperature, are drawn to the process by which the device is made. Reconsideration and withdrawal of this rejection are respectfully requested.

Amended claims 79-82 require a capacitor comprising a constituent of a UV irradiated organic platinum group metal precursor. Thus, Roh does not teach all of the limitations of amended claims 79-82. Furthermore, amended claims 79-82 require a dielectric layer in contact the barrier layer. Roh does not teach this limitation either. In contrast, Roh teaches a lower electrode that is “completely isolated from the polysilicon so that the TiW layer [the barrier layer] does not contact the high dielectric layer.” (*see* Roh column 6 lines 5-8).

Applicant further asserts that the limitations of amended claims 79-82 are structural limitations and are not merely drawn to the process by which the device is made. For instance, a dielectric layer in contact with the first electrode and the barrier layer, as required by amended claims 79-82 is drawn to the structure of the capacitor which includes the structural feature, *inter alia* of “at least one of the first and second electrodes comprises a constituent of an irradiated organic platinum group presursor.” Accordingly, claim 79 is a structure claim and defines a structure which is different from Roh.

Since Roh does not teach all of the limitations of amended claims 79-82, the §103 rejection is erroneous. Reconsideration and withdrawal of this rejection are respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned “Version with markings to show changes made.”

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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Respectfully submitted,

By 

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**Version With Markings to Show Changes Made**

79. (Amended) A capacitor comprising:

a barrier layer;

a first electrode [and a second electrode] in contact with said barrier layer;

[a dielectric provided between said electrodes; and]

a dielectric layer in contact with said first electrode and said barrier layer; and

a second electrode in contact with said dielectric layer, wherein at least one of said first and second electrodes comprises a constituent of an [is formed of a continuous platinum group metal by CVD deposition and irradiation with] ultraviolet irradiated organic platinum group metal precursor [light at a predetermined temperature and pressure and annealed in an oxygen atmosphere at low temperature].

80. (Amended) The capacitor according to claim 79, wherein said [electrode is formed of a material] constituent of said ultraviolet irradiated organic platinum group metal film comprises [selected from the group consisting of Ru, Rh, Pd, Os, Ir, Au, Ag and] Pt.

81. (Amended) The capacitor according to claim [80] 79, wherein said first electrode comprises a [is] platinum electrode.

82. (Amended) The capacitor according to claim 81 [79], wherein said platinum electrode is [the] a lower electrode.

83. (New) The capacitor according to claim 79, wherein said constituent is an oxygen annealed platinum group metal film.

84. (New) The capacitor of claim 83, wherein said oxygen annealed platinum group metal film is essentially free of carbon.

85. (New) The capacitor of claim 79, wherein said constituent is oxidation resistant.

86. (New) The capacitor according to claim 79, wherein said constituent of said ultraviolet irradiated organic platinum group metal film comprises Rh.

87. (New) The capacitor according to claim 79, wherein said constituent of said ultraviolet irradiated organic platinum group metal film comprises Pd.

88. (New) The capacitor according to claim 79, wherein said constituent of said ultraviolet irradiated organic platinum group metal film comprises Os.

89. (New) The capacitor according to claim 79, wherein said constituent of said ultraviolet irradiated organic platinum group metal film comprises Ir.

90. (New) The capacitor according to claim 79, wherein said constituent of said ultraviolet irradiated organic platinum group metal film comprises Au.

91. (New) The capacitor according to claim 79, wherein said constituent of said ultraviolet irradiated organic platinum group metal film comprises Ag.

92. (New) The capacitor according to claim 79, wherein said constituent of said ultraviolet irradiated organic platinum group metal film comprises Ru.